

Water Quality Division Montana Pollutant Discharge Elimination System (MPDES) Fact Sheet for Concentrated Animal Feeding Operations General Permit (CAFO GP)

Permit Number: MTG010000

Facility: Concentrated Animal Feeding Operations (CAFOs)
Receiving Water: Statewide except federally recognized Indian lands

Facility Contact: Applicant
Fact Sheet Date: July 2023

I. Permit Information

A. Permit Status

DEQ proposes to reissue the MPDES Concentrated Animal Feeding Operations General Permit (General Permit or CAFO GP), MTG010000. This Fact Sheet identifies changes from the 2023-General Permit and explains the legal requirements and technical rationale for the permit development process.

The previous Montana Pollutant Discharge Elimination System (MPDES) General Permit for Concentrated Animal Feeding Operations (CAFO GP) was issued by Montana DEQ, effective November 1, 2018, with an expiration date of October 31, 2023.

B. Proposed Permit Changes

- Technical Standards for CAFO Operations have been incorporated into Section II.D of the CAFO
 GP and removed from the 2018-Appendix D.
- Restructured permit for clarity and alignment with state and federal regulations.
- The NMP has been incorporated into the NOI form to reduce redundancy.

II. Description of Discharge and Discharging Facilities

A. Area of Coverage

This CAFO GP applies to discharges of manure, process wastewater, and other wastes to the state waters from CAFOs in the State of Montana, excluding discharges from Indian Lands.

B. Overview

There are currently 116 operations covered under the CAFO GP. The operations include cow-calf operations, feedlots (cattle, sheep and horses), sale and shipping yards, and hog and poultry facilities. Animal waste is typically removed annually from dry lot operations and then land-applied as solids with facility-owned or contracted manure-spreading equipment. Liquid wastes are stored in retention basins or holding tanks. Basins are either earthen, clay, or synthetically-lined. Holding tanks are of steel or concrete construction. Liquids are typically surface-applied by applicator tank trucks, injected into the subsoil with tractor-drawn toolbars or piped through irrigation delivery systems.

C. Coverage

Unless excluded from coverage, owners and operators of Montana CAFOs are eligible for coverage under the CAFO GP. Owners and operators of new and existing CAFOs must submit a complete Notice or Intent (NOI) Form, Nutrient Management Plant (NMP), and applicable fees. A CAFO must complete a public comment period for the CAFO's site-specific nutrient management plan. The

Department must complete any necessary review and approval for the NMP. Permittees must retain onsite a copy of the permit and the authorization letter.

D. Prohibited Operations/Discharges

DEQ may deny authorization to discharge under the CAFO GP. The following are excluded from coverage under the CAFO GP:

- 1. CAFOs that cannot comply with any applicable effluent standards, effluent limitations, standards of performance for new sources of pollutants, toxic effluent standards and prohibitions, and pretreatment standards, or any additional requirements that DEQ determines are necessary.
- 2. CAFOs that do not meet the adequate storage requirements for manure, litter, and process wastewater.
- 3. CAFOs that do not meet the minimum ground water protection.
- 4. CAFOs that cannot comply with any applicable water quality standards.
- 5. CAFOs that have discharges to which the regional administrator of the Environmental Protection Agency (EPA) has objected in writing.
- 6. CAFOs that DEQ has notified to apply for an individual permit.
- 7. If an MPDES permit or authorization for the same operation has been previously denied or revoked.
- 8. Discharge different in degree or nature from the sources or activities described in the General Permit.
- 9. Point sources in an area of unique ecological or recreational significance, as determined by Montana stream classifications, impacts on fishery resources, local conditions at proposed discharge sites, designations of wilderness areas, or designations of wild and scenic rivers.

E. Obtaining Permit Coverage and Application Process

- 1. **Notice of Intent Package:** Owners and operators of CAFOs seeking to be covered under this General Permit must submit a complete Notice of Intent package (NOI package), which includes:
 - a. Notice of Intent Form and Facility area map(s), completed to the satisfaction of DEQ.
 - b. Nutrient Management Plan (NMP) that meets the requirements of the CAFO GP and includes the required maps and photos depicting the production area and land application area(s).
 The terms of the NMP will be made available for public comment for a period of at least 30 days, and if necessary, revised based on any significant comments.
 - c. Appropriate application fee, which is determined by NOI status:

New Permit Application Fee: \$1,200 Renewal Application Fee: \$600

- e. If the CAFO is within designated sage grouse habitat, any modification due to a change in disturbed acreage requires a consultation letter or updates to a consultation letter from the Sage Grouse Habitat Conservation Program. If the operation is outside of sage grouse habitat, a consultation letter is not required. https://sagegrouse.mt.gov/
- f. If the CAFO is to a new source or new authorization, applicants must obtain analyses from:
 - i. Montana National Heritage Program https://mtnhp.org/
 - ii. Montana State Historic Preservation Office https://mhs.mt.gov/Shpo/

DEQ will complete all applicable reviews necessary to comply with the Montana Environmental Policy Act (MEPA) and decide whether to deny or issue an authorization letter for coverage under this General Permit. Upon review, DEQ may also request additional information from the CAFO if it is necessary to complete the NMP or to clarify, modify, or supplement previously submitted material.

Each authorization under the General Permit will be to a specific owner/operator of a CAFO facility. The operation will be allowed only in the area specified in the authorization letter, and discharge is only allowed via identified outfalls to specified receiving waters.

If the permittee wishes to continue an activity regulated by this permit after the expiration date of the permit, the permittee must apply for and obtain a new permit.

2. New Authorization Under the 2023-General Permit

The process for obtaining first time coverage under the General Permit is as follows:

- a. At least 60 days prior to operation, applicants must submit a complete NOI Package to DEQ.
- b. DEQ will review the NOI package for completeness.
 - If there are no deficiencies during the review, DEQ will make the terms of the NMP available for public comment for a period of at least 30 days, and, if necessary, have the applicant submit revisions based on any significant comments.
 - DEO will issue an authorization letter.
 - If the NOI package is deficient, permit coverage will not be granted. DEQ will notify the applicant of required information.

Applicants are not allowed to discharge without an authorization letter from DEQ.

3. Continuing Authorization Under the 2023-General Permit

Continued coverage applies to active permittees currently covered under the 2018-issued CAFO General Permit unless they are excluded according to the conditions in Section I.C of the General Permit. DEQ will reissue authorization to existing permittees through the process outlined below:

- a. Eligible applicants with **current** general permit authorization (2018-issued CAFO GP) must submit a complete renewal request (NOI package) for continued coverage. The NOI package must be submitted **within 30 days of the effective date of the 2023-General Permit**.
- b. DEQ will review the NOI package for completeness.
 - If deficiencies are not found during the review and no significant public comments are received, DEQ will issue an authorization letter.
 - If the NOI package is deficient, permit coverage will not be granted. DEQ will notify the applicant of required information.

4. Terminating Authorization

Permit coverage remains in effect until the expiration date of this General Permit or until DEQ receives notice from the permittee that the point source of discharge has been eliminated.

- a. Coverage under this permit may be terminated if one of the following three conditions is met:
 - i. The facility has ceased all operations and all wastewater or manure storage structures have been properly closed following the procedures outlined in the National Resource Conservation Service (NRCS) Conservation Practice Standard No. 360 and all remaining stockpiles of manure, litter, or process wastewater not contained in a wastewater or manure storage structure are properly disposed.
 - ii. The facility is no longer a CAFO that discharges manure, litter, or process wastewater to state waters.
 - iii. The entire discharge is permanently terminated by elimination of the flow or by connection to a publicly owned treatment works (POTW).
- b. Owners or operators may seek to be excluded from coverage under this General Permit by either submitting to DEQ a written Notice of Termination or by applying for an individual permit according to Part I.H. The written notice must include a reason and signed and certified by the owner or operator of the CAFO. The options for terminating permit coverage are listed below:
 - Permittees must complete and submit a Notice of Termination (NOT) form to DEQ.
 Annual fees will accrue until DEQ receives a Notice of Termination.
 - Current permittees may request to be excluded from coverage under this General Permit
 by applying for and obtaining an individual MPDES permit. If an individual MPDES
 permit is issued, coverage under this General Permit will be terminated on the effective
 date of the final individual MPDES permit.

5. Transferring Permit Coverage

DEQ may transfer authorization to a new owner or operator under the General Permit. A permit transfer constitutes written notice to DEQ under the Montana Water Quality Act that the new owner or operator assumes responsibility and liability for all the terms and conditions in the permit, including fees.

- a. The current owner and new owner must submit a completed Permit Transfer Notification (PTN) form to DEQ at least 30 days before the effective date of the proposed transfer. The PTN form is available at http://deq.mt.gov/water/resources/Forms
- b. The PTN form may not be used to transfer permit coverage to a new or different site location or to modify the terms and conditions of the permit.

If the new CAFO owner or operator modifies any part of the NMP, the NMP must be submitted to DEO consistent with Part I.D. of the CAFO GP.

6. Denied Authorizations

If a permittee is denied authorization to operate under the General Permit, DEQ will proceed to process the request for authorization through the individual MPDES permit requirements, unless the applicant withdraws the NOI or modifies the proposed discharge to meet the requirements of the General Permit. If the applicant withdraws the application, they must reapply with a full NOI package and applicable fees if they intend to seek future coverage under the General Permit.

F. Public Participation During the Permit Application Process

If DEQ makes a preliminary determination that the NOI-Package is complete, it will be made available for a 30-day public review and comment period on DEQ's website. DEQ will respond to any significant comments received during the comment period and, if necessary, require the CAFO owner or operator to revise the NMP. DEQ will notify the applicant of the final decision concerning the CAFO permit application. After DEQ authorizes permit coverage for the CAFO, the terms of the approved NMP will be incorporated as terms and conditions of the permit.

The permittee must notify DEQ of any proposed modifications to the NMP. DEQ will review the proposed modifications to determine if revision to the terms of the NMP is necessary.

- a. If revision to the terms of the NMP is not necessary, DEQ will notify the permittee and upon such notification the CAFO may implement the revised NMP; or
- b. If revision to the terms of the NMP is necessary, DEQ will determine whether such changes are substantial changes.
 - 1. If DEQ determines that the changes to the terms of the NMP are not substantial, the DEQ will notify the permittee and the public of any changes incorporated into the terms of the NMP on DEQ's website.
 - 2. If changes to the terms of the NMP are substantial, DEQ will make the proposed changes available for public review and comment for a 30-day public review and comment period on DEQ's website. DEQ will respond to any significant comments received during the comment period and, if necessary, require the CAFO owner or operator to revise the NMP. DEQ will notify the permittee of the final decision concerning the proposed changes to the NMP.

After addressing public comments, DEQ will issue a letter or authorization to the CAFO or notify the applicant to revise and submitted an updated NMP.

III. Receiving Waters and Applicable Standards

MPDES Permits must comply with Montana surface water quality standards.

IV. Technology Based Effluent Limits

Technology-based effluent limits (TBELs) represent the minimum level of treatment or control and are based on implementing available treatment technologies to reduce pollutants. TBELs are based on currently available treatment technologies and allow the permittee the discretion to choose applicable controls to meet those standards. The effluent limits and standards of the federal CAFO effluent limits apply to all facilities covered by the CAFO GP.

A. Effluent Limits and Standards - Production Area

There must be no discharge of manure, litter, or process wastewater pollutants from the production area into State Waters except when precipitation causes an overflow of manure, litter, or process wastewater.

For new swine, chicken, turkey, and veal calf operations there must be no discharge of manure, litter, or process wastewater pollutants from the production area into State Waters. These operations must meet the requirements of 40 CFR 412.46.

In an event where precipitation causes an overflow, the overflow may only be discharged to State Waters from eligible CAFOs provided that:

- 1. The production area must be designed, constructed, operated, and maintained to contain all manure, litter, and process wastewater including the runoff and the direct precipitation from a 25-year, 24-hour rainfall event. This storm event can be determined by the National Weather Service in Technical Paper No. 40, "Rainfall Frequency Atlas of the United States" or equivalent regional or State rainfall probability information developed from this source.
- 2. The production area must be operated in accordance with the additional measures and recordkeeping requirements specified in the CAFO GP.

B. Groundwater Protection Requirements - Production Area

There must be no discharge of manure, litter or process wastewater from the production area to State waters under the control of the CAFO owner or operator. Livestock waste control facilities must be sealed so that seepage loss through the seal is as low as practicably possible. Seals consisting of solids, bentonite, or synthetic liners may be considered provided the permeability, durability and integrity of the proposed material can be satisfactorily demonstrated for the anticipated conditions. Results of a testing program that substantiate the adequacy of the proposed seal must be incorporated into and/or accompany the design report. Testing must take place at the maximum operation depth. Standard ASTM procedures or similar acceptable methods must be used for all tests. To achieve an adequate seal in systems using soil, bentonite or other seal material, the coefficient of permeability (k) in centimeters per second specified for the seal may not exceed the value derived from the following expression: $k = (2.6 \times 10^{-9})$ L, where L equals the thickness of the seal in centimeters. Finished elevations for soil and bentonite liners may not vary more than three inches from the average elevation of the bottom and should be as level as possible. Sloped pond bottoms are allowed for synthetic liners, but they must be uniformly sloped.

Waste Containment structure must also meet the following criteria:

- 1. A minimum separation of 10 feet between the pond bottom and any bedrock formation must be maintained.
- 2. A minimum separation of 4 feet between the pond bottom and any ground water.
- 3. New wastewater containment structures or the manure and wastewater disposal sites must follow any applicable setbacks from water well(s).

A CAFO must submit to DEQ site-specific information demonstrating that the location of any wastewater containment structure will not be a source of pollutants to groundwater.

C. Effluent Limits and Standards – Land Application Area

By only allowing discharges in accordance with a site-specific NMP, these limitations and standards take into account the wide variability in the characteristics of individual land application areas scattered throughout Montana. NMPs specify the best management practices (BMPs) that a CAFO employs to prevent harmful discharges to state waters.

Discharge from the land application areas are subject to the following requirements:

- 1. Each CAFO that land applies manure, litter or process wastewater must do in accordance with the Best Management Practices (BMPs) specified below and in the CAFO GP:
 - a. Implement a NMP with field specific requirements that minimize the transport of nutrients;
 - b. Determine land application rates based on the following criteria:

- i. Field-specific information in form, source, amount, timing and method of land application needed to achieve realistic crop production goals; nutrient needs analysis; and nutrient budget; or
- ii. NRCS Conservation Practice Standard Code 590 for fields allowed a multi-year phosphorus application;
- c. Testing procedures for manure, litter, and process wastewater;
- d. Testing procedures for soil;
- e. Analytical laboratories approved for manure and soil testing;
- f. Timing and conditions of land application;
- g. Winter application requirements;
- h. Equipment inspection and calibration;
- i. Setbacks from surface waters, ground water, drainage tiles, wells, sinkholes, and conduits to surface waters:
- 2. Maintain the records specified in the permit;

D. Nutrient Management Plan

All CAFOs covered under the CAFO GP must develop and implement a NMP that complies with all applicable regulations. See Section II.F of the CAFO GP.

E. Effluent Limits for Other Discharges

- 1. Process wastewater discharges from outside the production area: Process wastewater discharges from outside the production area must be identified in the NMP, and the NMP must identify measures necessary to meet applicable water quality standards in DEQ Circular 7. This includes washdown of equipment that has been in contact with manure, raw materials, and products or byproducts that occur outside of the production area and runoff of pollutants from raw materials. Products or byproducts from the CAFO that have been spilled or otherwise deposited outside the production area and which are discharged to State waters, must be identified in the NMP. Examples include manure, feathers, litter, bedding, and feed.
 - a. Discharges that do not meet the definition of process wastewater include:
 - Discharges that have not been in contact with manure, raw materials, products and byproducts; and are associated with feed, fuel, chemical or oil spills, equipment repair, and equipment cleaning.
 - ii. Domestic wastewater discharges to State waters.

V. Water Quality Based Effluent Limits

No wastes may be discharged such that the waste either alone or in combination with other wastes will violate or can reasonably be expected to violate any standard. MPDES permits include limits on all pollutants which will cause, or have a reasonable potential to cause, an excursion of any water quality standard, including narrative standards.

Montana's water quality standards can be maintained through compliance with the effluent limitation in the CAFO GP. This includes not only the BMPs as contained within the NMP, but other corrective action, inspection, monitoring, reporting and recordkeeping requirements. The BMPs in the NMP minimize or eliminate the generation or migration of pollutants to state waters. The permit prohibits the discharge of pollutants except as a result of precipitation falling on the facility that exceeds the design capacity of the waste impoundment.

VI. Special Conditions

A. Facility closure

Any facility that intends to cease operations must permanently close all waste containment and transport structures. These structures must be abandoned such that they will no longer have the potential to discharge to State waters. See Section IV.A of the CAFO GP.

VII. Standard Conditions

The standard conditions included in the CAFO GP are based on standard conditions applicable to all MPDES permits. See Part V of the CAFO GP.

VIII. Monitoring and Recordkeeping Requirements

The CAFO GP includes monitoring, reporting and recordkeeping requirements. It includes requirements to report discharges to state waters, as well as requirements to monitor and report instances of noncompliance with permit conditions. The CAFO GP also contains annual reporting requirements, and requirements to monitor and record the implementation of the facility's site-specific NMP. It also includes records retention requirements.

IX. Mixing Zones

The effluent limits and standards in the CAFO GP, in combination with the other terms and conditions of the CAFO GP, represent the practices and prohibitions necessary in order for an eligible CAFO to comply with Montana's surface water quality standards. If a source applying for coverage under the CAFO GP appears unable to comply with Montana's water quality standards, coverage under the CAFO GP may be denied. Therefore, granting of a mixing zone is not warranted. Facilities which cause or contribute to a violation of a water quality standard cannot meet the conditions of the CAFO GP and must apply for an individual MPDES permit.

X. Nondegradation

DEQ has determined the any discharge in compliance with the effluent limitation and of terms and requirements of this permit are nonsignificant. This finding is based on the following: 1) any discharge from the land application site that is in conformance with the terms and condition of the NMP are considered as agricultural runoff and would have minimal impact on the receiving water; and 2) any discharge from the production area in compliance with the terms and conditions of the permit would provide initial treatment, be of short duration, and not cause a permanent change in water quality given.

XI. Total Maximum Daily Load (TMDL)

The CAFO GP includes requirements for CAFOs and land application sites located within watersheds that are impaired for nutrients. These requirements ensure that nutrients are utilized by crops and do not enter State waters. Therefore, the CAFO GP, when properly implemented, is consistent with the assumptions and requirements of existing nutrient TMDLs and anticipated assumptions and requirements of future nutrient TMDLs.

XII. Procedures for Reaching a Final Decision on Draft Permit MTG010000

A. Public Notice and Comment Period – Documents

- 1. The following documents will be public noticed for a period of 35 days beginning July 17, 2023, and ending at the close of business on August 21, 2023:
 - a. The draft General Permit for Concentrated Animal Feeding Operations (CAFO GP), Permit No. MTG010000
 - b. The draft Fact Sheet for the General Permit for Concentrated Animal Feeding Operations (CAFO GP), Permit No. MTG010000; and
 - c. The draft Environmental Assessment for the General Permit for Concentrated Animal Feeding Operations (CAFO GP), Permit No. MTG010000
- 2. During the public notice period described above, comments on the six documents will be received at the following postal address:

Department of Environmental Quality Water Protection Bureau P.O. Box 200901 Helena, Montana 59620-0901

3. Comments may be emailed to DEQ at <u>DEQWPBPublicComments@mt.gov</u>. All comments must be received by DEQ by the close of business on August 21, 2023.

B. Public Notice of Hearings to be Held

DEQ will hold a Public Hearing at 10:30 AM on August 21, 2023 in Room 111 at DEQ offices in the Metcalf Building in Helena

C. Conditions Requested by Government Agencies

If during the comment period the U.S. Fish and Wildlife Service, the National Marine Fisheries Service, or any other state or federal agency with jurisdiction over fish, wildlife, or public health advises DEQ in writing that the imposition of specified conditions upon the CAFO GP is necessary to avoid substantial impairment of fish, or wildlife resources, DEQ may include the specified conditions in the permit to the extent they are determined necessary to carry out the provisions of the Montana Water Quality Act.

D. Response to Public Comments

Following the public comment period and the public hearings, DEQ will make a final permit decision. At the time that the final permit decision is issued, DEQ will issue a response to comments received during the public comment period and the public hearings. The response will specify which provisions, if any, of the draft permit and other publicly noticed materials have been changed in the final permit/other materials, and the reasons for the change(s). The response to comments will also briefly describe and respond to all significant comments raised during the public comment period and hearings.

E. For Additional Information

For additional information concerning the CAFO GP, or the information, documents, and procedures discussed in this Fact Sheet, please contact the Water Protection Bureau at (406) 444-3080.

XIII. Information Sources

Federal Water Pollution Control Act (Clean Water Act), 33 U.S.C. §§ 1251-1387, October 18, 1972, as amended 1973-1983, 1987, 1988, 1990-1992, 1994, 1995 and 1996.

Montana Code Annotated (MCA), Title 75-5-101, et seq., "Montana Water Quality Act,".

Administrative Rules of Montana Title 17 Chapter 30 - Water Quality

Subchapter 2 - Water Quality Permit and Application Fees.

Subchapter 5 - Mixing Zones in Surface and Ground Water.

Subchapter 6 - Montana Surface Water Quality Standards and Procedures.

Subchapter 7- Nondegradation of Water Quality.

Subchapter 12 - MPDES Standards.

Subchapter 13 - MPDES Permits.

Montana DEQ. Circular DEQ-7, Montana Numeric Water Quality Standards. June 2019.

Montana Pollutant Discharge Elimination System Permit Number MTG310000. Administrative Record.